Grade 6 Math

Correlation Guide

correlation guide overview

This correlation guide is designed to identify lead4ward mathmark activities that align with Bluebonnet Learning Modules and Topics. Brief descriptions, including activity type and instructional delivery method are also provided.

Note: mathmark activities were designed for TEKS Clusters (big concepts) that typically require additional time and focus in the curriculum; therefore, some Bluebonnet Modules or topics may not have mathmark activities listed.

Activity Type
One or more ways the activity could be used in instruction

Delivery
instructional delivery method applicable to activity

Bluebonnet Topic

mathmark Cluster and Subcluster

may include general topic for aligned acitivities

mathmark Activity Title / Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Ratios and Rates							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Ratios/Rates							
Go Fish 6.4(B), 6.4(C), 6.5(A)	**Understand Ratio as Multiplicative Comparison** Using the context of tagging fish, students create tables and graphs and answer questions about the data.	✓	✓		✓		
Social Media 6.4(B), 6.4(C), 6.5(A)	**Understand Ratio as Multiplicative Comparison** Using the context of social media use, students create tables and graphs and answer questions about the data.	✓			✓		
Golden Ratios and Proportions 6.4(B), 6.4(C), 6.4(D), 6.5(A)	**Understand Ratio as Multiplicative Comparison** Students investigate the Golden Ratio in the human body, then create tables and graphs with data and answer questions.			✓		✓	
Rate It 6.4(B), 6.4(C), 6.4(D), 6.5(A)	**Interpret the Meaning of Rate** Using the contexts of the growth rate of a hippo and bats in Austin, students create tables and graphs with data and answer questions.	✓	✓		✓		
Which Is the Better Deal? 6.4(B), 6.4(D), 6.5(A)	**Represent Rates Using Tables and Graphs** Using the context of the best deal on a video game subscription, students create tables and graphs with data and answer questions including choosing the preferred deal.	✓			✓		
Field Trip to the Gravity Gym 6.4(B), 6.4(D), 6.5(A)	**Represent Rates Using Tables and Graphs** This activity is a multi-day summary project where students plan a field trip while creating tables and graphs to explain their plan.			✓		✓	

mathmark activity title/SEs

includes title of mathmark activity and aligned SEs. Readiness standards in green

mathmark activity info

includes activity topic in **blue** with a brief description of the activity and content

mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Factors and Multiples							
TEKS Cluster: All Operations with Rational Numbers **TEKS Subcluster**: Multiplication and Division with Positive Rational Numbers							
Fractions and Division 6.2(E)	**Equivalent Numeric Expressions** Students rewrite expressions containing fractions as a numeric expression using division. They rewrite numeric expressions containing division using fractions.	✓	✓		✓		
Greater or Less? 6.3(B)	**Size of Products** In this whole class exploration, students tell whether multiplying by a number will yield a product that is the same, less than, or greater than the original number.	✓	✓		✓		
Modeling Fraction Multiplication 6.3(E)	**Multiply Fractions Using Models** Students multiply fractions and mixed numbers using area and length models. Then solve the equations.	✓	✓		✓		
Tiny and Tinier 6.3(E)	**Multiply Fractions** Students multiply fractions using models and equations. Then they tell whether the product is larger or smaller than what they started with.		✓	✓		✓	
The Worst Restaurant on the Moon 6.3(E)	**Multiply Fractions and Mixed Numbers** Students practice multiplying fractions and mixed **numbers**.		✓	✓		✓	
Sharing Food 6.3(A), 6.3(E)	**Division of Fractions and Mixed Numbers** Students use models and drawings to divide fractions and mixed numbers.	✓	✓		✓		
Equation and Solutions 6.3(A), 6.3(E)	**Connect Fraction Division Problems with Equations and Solutions** Students match word problems with fraction division and multiplication equations to solve problems.		✓	✓		✓	
It's a Set Up 6.3(E)	**Patterns in Multiplication and Division of Fractions** This activity contains 6 sets of either fraction division or multiplication problems. Work focuses on the similarity between the problems, so students see the patterns in the operations. These sets may be used all together or broken up over several days.		✓	✓		✓	✓
Millie the Millipede 6.3(E)	**Multiply Decimals Less Than One** Students estimate products, then use models to multiply decimals that are less than one.	✓	✓		✓		

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mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Factors and Multiples (cont'd.)							
TEKS Cluster: All Operations with Rational Numbers **TEKS Subcluster**: Multiplication and Division of Rational Numbers (cont'd.)							
Athletic Alex 6.3(E)	**Multiply Decimals Larger Than One** Students estimate products, then use models to multiply decimals that are greater than one.	✓	✓		✓		
Set Patterns 6.3(E)	**Patterns in Multiplication of Decimals** This activity contains 6 problem sets designed to teach students the patterns of the decimals and why the patterns exist for multiplying decimals. Sets can be used together to broken up over several days.		✓	✓		✓	✓
How Many Can I Buy? 6.3(E)	**Dividing Decimals** Students estimate quotients, partition a model, and divide decimals.	✓	✓		✓		
How Much Should I Buy? 6.3(E)	**Dividing Decimals** Students estimate quotients, partition a model, and divide decimals. Some quotients terminate, some repeat, and some neither terminate nor repeat and have to be rounded.	✓	✓		✓		
Feeding the Zoo 6.3(E)	**Multiplication and Division of Rational Numbers** Students solve problems that contain both fractions and decimals.		✓	✓		✓	
Bluebonnet Topic 2: Shapes and Solids							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Triangles							
What's the Sum? 6.8(A)	**Sum of the Angles of a Triangle** Students perform a hands-on experiment to discover that the angles of a triangle add to 180°. They find the missing measures of angles of triangles and choose angle measures that could form a triangle.	✓	✓		✓		
Triangle Relationships 6.8(A)	**Relationship Between Angles and Sides of Triangles** Students choose a triangle that matches the given attributes and justify their choice.	✓	✓		✓		
Is It or Isn't It? 6.8(A)	**Relationship Between the Lengths of the Sides of a Triangle** Students use concrete models to determine if lengths could form a triangle and tell why or why not.	✓	✓		✓		

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Bluebonnet Topic 2: Shapes and Solids (cont'd)							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Area/Volume							
Triangles 6.8(B), 6.8(C)	**Understand the Formula for Area of Triangles** Students connect the formula for the area of a rectangle to the area of a triangle and use the formula to find area of triangles.	✓			✓		
Parallelograms 6.8(B), 6.8(C)	**Understand the Formula for Area of Parallelograms** Students connect the formula for the area of a rectangle to the area of a parallelogram and use the formula to find area of parallelograms.	✓			✓		
Trapezoids 6.8(B), 6.8(C)	**Understand the Formula for Area of Trapezoids** Students connect the formula for the area of a rectangle to the area of a trapezoid and use the formula to find area of trapezoids.	✓			✓		
Different Shapes, Different Formulas 6.8(C), 6.8(D)	**Use Formulas to Find Area** Students write problems, draw diagrams, write equations or formulas, and/or solve problems including missing dimensions.	✓	✓		✓		
Putting It All Together 6.8(C), 6.8(D)	**Area Practice** Students work collaboratively to solve area problem that include conversions.		✓	✓		✓	
Two Can Play This Game 6.8(C), 6.8(D)	**Estimate and Solve Area Problems** Students play a game where the winner is the person who estimates the closest to the actual area of a figure.			✓		✓	
What Is Big B? 6.8(C), 6.8(D)	**Volume of Rectangular Prisms** Students are introduced to "Big B" in the volume formula and use the information to find big B and volume.	✓	✓		✓		
Mistakes and Missing Dimensions 6.8(C), 6.8(D)	**Volume of Rectangular Prisms** Students find and correct mistakes in volume problems.		✓	✓		✓	
Big Cat Sanctuary 6.8(C), 6.8(D)	**Area and Volume** Students use information from problem to fill in the blanks in the formula and find area or volume.			✓		✓	
Bluebonnet Topic 3: Decimals							

Bluebonnet Learning – Grade 6 Module 2:
Relating Quantities

mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Ratios and Rates							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Ratios/Rates							
Go Fish 6.4(B), 6.4(C), 6.5(A)	**Understand Ratio as Multiplicative Comparison** Using the context of tagging fish, students create tables and graphs and answer questions about the data.	✓	✓		✓		
Social Media 6.4(B), 6.4(C), 6.5(A)	**Understand Ratio as Multiplicative Comparison** Using the context of social media use, students create tables and graphs and answer questions about the data.	✓			✓		
Golden Ratios and Proportions 6.4(B), 6.4(C), 6.4(D), 6.5(A)	**Understand Ratio as Multiplicative Comparison** Students investigate the Golden Ratio in the human body, then create tables and graphs with data and answer questions.			✓		✓	
Rate It 6.4(B), 6.4(C), 6.4(D), 6.5(A)	**Interpret the Meaning of Rate** Using the contexts of the growth rate of a hippo and bats in Austin, students create tables and graphs with data and answer questions.	✓	✓		✓		
Which Is the Better Deal? 6.4(B), 6.4(D), 6.5(A)	**Represent Rates Using Tables and Graphs** Using the context of the best deal on a video game subscription, students create tables and graphs with data and answer questions including choosing the preferred deal.	✓			✓		
Field Trip to the Gravity Gym 6.4(B), 6.4(D), 6.5(A)	**Represent Rates Using Tables and Graphs** This activity is a multi-day summary project where students plan a field trip while creating tables and graphs to explain their plan.			✓		✓	

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 2: Percents							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Fractions/Decimals/Percents							
A New Way to Describe Parts of a Whole 6.4(E), 6.5(C)	**The Meaning of Percent** Students learn to use percent to describe part of a whole and connect percents with fractions and decimals.	✓	✓		✓		
Models of Fractions, Decimals, and Percents 6.4(F), 6.5(C)	**Use Models to Connect Fractions, Decimals, and Percents** Students model decimals on a grid, a number line, and in a strip diagram. Then they write equivalent fractions, decimals, and percents.	✓	✓		✓		
"Easy" Fractions and Percents 6.4(F)	**Benchmark Fractions and Percents** Students model benchmark fractions, decimals, and percents on a grid, a number line, and in a strip diagram. This activity includes thinking problems where students use the models they created and reasonableness to find solutions.	✓	✓		✓		
Fraction, Decimal, Percent Conversions 6.4(F), 6.4(G), 6.5(C)	**Generating Equivalent Fractions, Decimals, and Percents** Students use mental math to identify equivalent fractions, decimals, and percents. Some fractions are beyond 100%.	✓	✓		✓		
Real-World Fractions, Decimals, and Percents 6.4(E), 6.4(G), 6.5(C)	**Fraction, Decimal, Percent Conversions** Students estimate to find the closest benchmark percent and convert among fractions, decimals, and percents.			✓		✓	
Fraction, Decimal, Percent Conversion Practice 6.4(G), 6.5(C)	**Find the Mistake** This find-the-mistake activity includes incorrect models for fractions, decimals, and percents and incorrect equations.			✓		✓	
The Percent Proportion 6.5(B)	**Solving Part, Whole, Percent Problems** Students use percent bars and problem bars to organize information to set up a percent proportion and solve.	✓	✓		✓		
Part, Whole, Percent Match Up 1 6.5(B)	**Solving Part, Whole, Percent Problems** In this card sort, students match problems with models and equations and solve.	✓	✓		✓		
Part, Whole, Percent Match Up 2 6.5(B)	**Solving Part, Whole, Percent Problems** In this card sort, students match word problems, proportions, models and solve problems. This activity uses relatively the same numbers for each problem to focus attention on the structure of different types of percent problems.			✓		✓	
Part, Whole, Percent Problems Practice 6.5(B)	**Find the Mistake** This find-the-mistake activity includes incorrectly set up proportions and proportions that are solved incorrectly.			✓		✓	

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 3: Unit Rates and Conversions							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Conversions							
Wild Measurements 6.4(H)	**Perform Conversions Using Proportions and Unit Rate** Students perform conversions using tables, unit rates, and proportions. Discussion focuses on whether to multiply or divide and why, writing an equation to represent the conversion, telling what the conversion or number means, and relating the units using algebraic language.	✓	✓		✓		
Outta This World 6.4(H)	**Perform Conversions Using Proportions and Unit Rate** In this card sort, students create tables and use tables, unit rate, and proportions to perform conversions.			✓		✓	
Gross, But True 6.4(H)	**Perform Conversions Using Proportions and Unit Rate** Students perform conversions using tables, unit rates, and proportions. Discussion focuses on whether to multiply or divide and writing an equation.			✓		✓	

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Signed Numbers and the Four Quadrants							
Bluebonnet Topic 2: Operating with Integers							

Bluebonnet Learning – Grade 6 Module 4:
Determining Unknown Quantities

mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Expressions							
TEKS Cluster: Expressions, Equations, Inequalities **TEKS Subcluster**: Order of Operations							
Exponents and Prime Factorization 6.7(A)	**Understanding Exponents and Prime Factorization** This is a two-part activity. Part 1 focuses on understanding exponents and writing expressions using exponents. Part 2 focuses on determining prime factorization and writing with exponents.	✓	✓		✓		
Order of Operations 1 6.7(A)	**Find the Value of Numerical Expressions** Students review order of operations and simplify expressions including integers, but not exponents.	✓	✓		✓		
Order of Operations 2 6.7(A)	**Find the Value of Numerical Expressions** Students review order of operations and simplify expressions including integers and exponents.	✓	✓		✓		
Find the Equivalent Expressions 6.7(A)	**Equivalent Numerical Expressions** As a whole class, students learn what equivalent means, identify equivalent expressions, and then match.	✓	✓		✓		
From Numerical to Algebraic Expressions 6.7(B), 6.7(C), 6.7(D)	**Identify Equivalent Algebraic Expressions** This activity introduces algebra tiles, focusing on how they differ from base-ten blocks. Students build algebraic expressions and determine if algebraic expressions are equivalent based on the models.	✓	✓		✓		
A New Way to Think About Fractions 6.7(D)	**Equivalent Algebraic Expressions** Students learn the connection between fractions and division and rewrite expressions with a fraction bar so that they include the division symbol.	✓	✓		✓		
Equivalent Expressions Match Up 6.7(D)	**Equivalent Algebraic and Numeric Expressions** This matching activity may be used in multiple ways, such as a whole class, pairs, stations, or on a bulletin board.			✓		✓	✓

mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 2: Equations and Inequalities							
TEKS Cluster: Expressions, Equations, and Inequalities **TEKS Subcluster**: Representation and Solutions of Equations/Inequalities							
From Arithmetic to Equations 6.9(B), 6.10(A), 6.10(B)	**Model and Solve One-Step Equations** In this two-part activity, students solve addition and subtraction equations in Part 1 and multiplication and division equations in Part 2. They use algebra tiles to solve equations, write the solution process, and graph the solutions.	✓	✓		✓		
Problems to Equations to Solutions 6.9(B), 6.10(A), 6.10(B)	**Use Equations to Represent and Solve Problems** This activity introduces the idea of operations on a variable. Students write equations to represent word problems, solve, and graph the solutions.	✓	✓		✓		
Mr. Haroo's Zoo 6.9(A), 6.9(C), 6.10(A)	**Match Equations and Problems** Students match word problems with equations and solve.		✓	✓		✓	
From Comparisons to Inequalities 6.9(B), 6.10(A), 6.10(B)	**Represent Inequalities on a Number Line** Students learn the meaning of *inequality* and how to graph inequalities on a number line. Note that this activity only includes graphing inequalities, not solving them.	✓			✓		
Solving Inequalities 6.9(B), 6.10(A), 6.10(B)	**Solve One-Step Inequalities** In this two-part activity, students solve and graph addition and subtraction inequalities and multiplication and division inequalities.	✓	✓		✓		
Greater Than or Less Than 6.9(A), 6.10(A)	**Use Inequalities to Represent Problems** Students write and solve inequalities that represent word problems and graph the solutions.	✓	✓		✓		
Greater Than, Less Than, or Equal To 6.9(C)	**Use Equations and Inequalities to Represent Problems** Students sort word problems according to whether they represent =, <, >, ≥, or ≥ and solve them.		✓	✓		✓	
Bluebonnet Topic 3: Graphing Quantitative Relationships							
Bluebonnet Topic 4: Financial Literacy: Accounts, Credit, and Careers							

mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: The Statistical Process							
Bluebonnet Topic 2: Numerical Summaries of Data							